

Land policy REVIEW

Contents FOR AUGUST 1941 Vol. IV No. 8

	Page
Fighting Farmers C. Vann Woodward	3
Problems of Suburbia Larry F. Diehl	8
Kingsbury's 67 Years W. F. Kumlien	14
For Farm Consultants Sherman E. Johnson	21
Tractors Don't Eat Oats A. P. Brodell	25
Farmers' Tenure Status John F. Timmons	29
National Income and Debt Henry A. Wallace	36
Western Solidarity Preston E. James	41
Books J. Paul Miller, Arthur Anderson	45

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS



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IN LATER ISSUES: *The Management of Seasonal Labor*, by William T. Ham; *Oregon Tackles the Forest Problem*, by J. R. Beck; review of *Singing Valleys*, by DeWitt C. Wing; *The Philosophy of Agricultural Cooperation*, by Alva H. Benton; letters from readers about *Planning for Post-War Agriculture*.

A UNIT OF ACTION through the whole land is what we are desirous of establishing—of drawing the whole farming community into one bond of intercourse and exchange of information. We consider this is best done by breaking down all idea of locality, and we are gratified by being able ourselves to exemplify the fact that an agricultural paper can be so carried on as to destroy all conception of local feeling, by making its editorial department embrace a field literally without a boundary, and alive to the interests of the whole extent of the Union.—WESTERN FARMER AND GARDENER (1842).

LAND • POLICY • REVIEW

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American Agrarianism: A FIGHTING TRADITION

By C. VANN WOODWARD. *It is not enough for people to have a burning consciousness of their wrongs. It is not even enough for them to put in power their own spokesmen. A people may have all these qualities and still become enslaved.*



PEOPLE say that the leadership of progressive democracy has passed from the country to the city.

Perhaps so.

But progressivism, from the turn of the century, has been a country movement come to town. The varnish of many a streamlined, modern policy does not conceal its backwoods origin. The hayseed is the secret badge of the progressives, the device on the crest of the urban planners. Maybe the farmer sometimes is taken aback by the brashness of his offspring's citified ways and even may fail to recognize one of them as his own. The important thing at this time is that the paternity be acknowledged on both sides.

Our times have seen the rapid expansion of Government agencies, services, and controls, accompanied, perhaps, by what our fathers liked to

call "paternalism," a thing that fairly frightened them out of their skins. Two things it meant to them were the technician, in love with his "efficiency," and a passive farm population waiting for ready-made solutions from Washington.

Now, if the history of the American farmer reveals anything whatever about his character, it is that the qualities of meekness and passivity seem to have been pretty generally left out of his make-up. Only yesterday the cartoonist's favorite symbol of radicalism was a figure armed with a pitchfork.

The image is of ancient lineage. It would have been appreciated by a Colonial governor, a Revolutionary loyalist, a Hamiltonian Federalist, an aristocratic Whig of the 1850's, or a conservative Easterner of the 1890's. Indeed, from Colonial days to 1900 the farmer was the spearhead of

democratic reform. In fact, this peculiarity of American radical movements has distinguished American history from that of Europe, where city streets have been the traditional hatchery for advanced notions.

The compulsions that goaded the American farmer into political action were more serious than Texas heat waves or the spotted mountain fever by which critics on occasion alleged that the agrarians had been "tetched." Those compulsions, when they were not legitimate grievances against hostile economic interests, were drives for the realization of plans and policies to relieve agricultural distress due to nature, to forces beyond the farmer's grasp, or to the farmer's own mistakes.

Political Cooperation

The farmer's demands frequently called for legislation at sharp variance with established opinions, sometimes for a departure from tradition or fashionable economic theories. The cry that his schemes were radical never seemed to bother the farmer. He renewed his demands. He usually got results. As a rule, each great upsurge of agrarian feeling sprang from resentment against some malefactor to the east.

As long as farmers cooperated politically, regardless of geographical allegiances or sectional differences, they could enforce their demands and keep in power a government that was solicitous of their welfare.

Then came the great tragedy of the 1860's and 1870's—not the least tragic part of which was the division in the ranks of American farmers. In the 1850's western and southern farmers formed alliances with forces

in each section against which they had often fought. In the 1860's western farmers were shooting southern farmers, and vice versa. In the 1870's the shooting ended and, the right flank of the agrarian army smashed, the farmers of the West and South remained alienated, voting against each other, clinging still to conservative allies. A New York-Atlanta axis was consolidated to unite the "new" South of industrial aspirations with the industrial East. Opposing it in party battles for office was the Philadelphia-Omaha axis, uniting the "new" West with its wartime ally. Neither alliance was concerned with pressing issues of the day or even fundamentally divided over them.

It was during this period of division among agrarians that industrialists and financial interests seized political power, setting up or pulling down one administration after another, insisting always on subservience to private interests. The control of the Federal Government was essential for the construction and security of this new order. Manipulation of currency laws, bank systems, taxation, tariffs, land policies, and transportation laws by the new masters erected a magnificent structure of privilege and protection in the shape of judicial opinions, injunctions, generous corporation charters and franchises, land grants, and tax exemptions. Empires of land the size of European nations were doled out to railroads; freedom from the competition of European manufactures was assured industrialists; while protected from cheap foreign products, the manufacturers were at the same time assured of a supply of cheap foreign labor by the proper immigration laws.

Slowly the farmer began to awaken to the true significance of his position and the nature of his new allies. The western farmer had received his homestead act and his railroads all right, just as promised by his eastern war ally. But it turned out that the railroads got about all the land worth having. The southern farmer, who dutifully joined in support of the succession of eastern candidates for President nominated by his party, found his wishes rarely consulted, even when the nominee was successful. As for his party—of so many glorious associations—it had forgotten its agrarian origins.

Laissez Faire

The ironic thing about the farmer's political plight was that the only way in which he could save himself from virtual serfdom under the new system necessitated a roughshod trampling upon the most sacred principle of the traditional agrarian creed—*laissez faire*.

Fortunately for the farmers of the new era, their sense of realities saved them from confusing words with substance. They quickly perceived that the slogan of *laissez faire* had changed hands, that now industrialism was marching forward under its magic. They guessed that perhaps "let be" is a doctrine appropriate only to an order that is satisfied with arrangements as they are, a gospel for the "haves," not for the "have nots." One thing at least was clear: the farmer was *not* satisfied with arrangements as they were and he was *not* among the "haves." With little more ado, the farmer bade good-bye to *laissez faire*.

The first maneuver came not on the national scale, since the Federal

Government had slipped from the farmer's control, but in the theater of State politics, where he still had a voice. The railroad monopoly in those days was an accepted symbol of oppression. In the early 1870's some of those agrarian States not under military dictatorship (as several southern States were at the time) organized for political action, elected tickets of mayors, legislators, and governors, and wrote into law "the first mandatory railroad laws ever placed on American statute books."

Commissions were set up to enforce the new laws against the long-and-short-haul evil, rebates, pooling, free passes, and unreasonable freight rates. Inexperienced as they were, these were the first steps in the long forward march.

Still without effective influence in the Federal Government, the farmer found himself checkmated by one of its branches. The Supreme Court in the Wabash decision of 1886 reversed its position of 10 years' standing and shut the States out of the field of interstate commerce regulation—even when there were no Federal laws on the subject. Accepting the challenge promptly, Reagan, of Texas, with the support of agrarian votes from the South and West, introduced in Congress and pushed to passage the Interstate Commerce Act of 1887. The old West-South alliance was again taking shape.

With their law on the books, the farmers discovered that an indifferent or unfriendly administration makes all the difference in the world in the effectiveness of a law. Weakened by the judiciary and neglected by the executive departments, the Interstate Commerce Act was in danger of lapsing into oblivion. To

strengthen it and put teeth in it, the same elements that had passed it in the first place now buttressed the law with the Elkins Act of 1903, the Hepburn Act of 1906, and the Mann-Elkins Act of 1910. This was only after the demand by the farmers' minority party, the Populists, for outright Government ownership and operation of the railroads had been rejected by the country in the election of 1892.

The farmer's abandonment of the tradition of *laissez faire* was a momentous milestone of American history. The congressional agrarians doubtless did not realize the full significance of the moment, but their vote for the Interstate Commerce Commission in 1887 marked what one historian has called the beginning of "the twilight of individualism in the United States."

Doubts and Questions

It turned out to be a long twilight, but here was its beginning. From that small crack in the massive walls of *laissez faire* the Federal Government entered into the vast field of regulating big business in the interest of society. Ahead lay the great accomplishments in the restriction of unfair business practices, consumer protection, wage-and-hour laws, child-labor laws, securities and exchange regulations, banking and investment regulations—regulations reaching down into almost every field of private enterprise. The era of social democracy had dawned in America, and the farmer was the only man up at the break of day.

Certain doubts and questions arise at this point, especially in view of contemporary developments in Eu-

rope. Lessons from abroad seem to make several things plain. First, it seems clear that it is not enough for a people to possess a burning consciousness of their wrongs and grievances. It is not enough for them to have the courage and spirit to challenge wrongdoing and put down its perpetrators. It is not even enough for them to put in power their own spokesman and their own kind. A people may have all these qualities and achievements and still become enslaved. It seems clear that a people's destinies cannot simply be placed in the hands of engineers and intellectuals and politicians and left there. Stopping there, we stop short of democracy.

Too many people tend to think of the democratic process as satisfied by elections, by making clear the will of the majority. But plans of dictators have the apparent support of the majority of their subjects. The dictators say they are even ready to demonstrate the fact by huge plebiscites. If this is true and if majority votes are democracy, then wherein lies its difference from dictatorship?

The essential difference lies in what the people do after they have chosen their legislators and judges and administrators. They must govern even after they have chosen their governors. If they stop short of that and rest, satisfied with elections, the result is not democracy. The planning, the policy making, and legislation cannot be left up to representatives or executives or the hordes of experts to whom must be delegated authority. The people must participate in those processes, too.

How, then, does the heritage of the American farmer measure up to this requirement?

Again the record of his doings is reassuring. Probably no class of citizens can boast of such an extensive record of homespun policies, hand-tooled planning, and home-made legislation as the farmer. Examples to substantiate this statement could be drawn from far back, but we need go no further back than the memory of many farmers now living, to the 1880's and 1890's.

The urgent problems of the farmer, then, aside from the railroad abuses, were the need for satisfactory credit facilities; the need for marketing facilities free from commission men, brokers, and speculators; the need to break the grasp of tariff-protected industrial monopolists; the need for freedom from the petty dictatorship of the country supply merchant, with his crop lien, his sky-high prices, and his dubious bookkeeping. These among others.

First came the process of organization. In the last 3 years of the 1880's the Farmers' Alliance, originating in the South, spread rapidly over the Nation to embrace something like 4,000,000 members. The weight of the organization was used to elect local officials, and scores of Congressmen were pledged to the support of the Alliance program of legislation, a gradually evolved and carefully debated program.

The farmers did not stop there. They attacked their immediate problems with direct action. They faced the country merchant and crop-lien system with hundreds of cooperative retail stores, and frequently underbid

their private competitors 25 to 50 percent.

Illinois farmers organized a grain pool for shipping direct to the central markets. Many other States experimented with cooperative marketing. The Dakota Alliance tried out cooperative fire, hail, and life insurance. The Texas Alliance undertook to market the farmer's crops and purchase his supplies for him. The Texas Exchange, opened for business in 1887, stocked some \$50,000 worth of merchandise, and claimed a \$1,000,000 business the first year of operation. The Georgia Exchange, called the strongest in the South, was said to have saved its patrons \$200,000 in 1 year in fertilizers alone. Alliance ventures in the field of cooperative manufactures were not infrequent.

Not all the cooperatives were successes. But not even the lowliest failed altogether, for their achievement was greater than could be estimated in bookkeeper's terms.

They renewed the farmer's faith in himself and reviewed a fighting tradition. They pointed the way to escape from the danger of becoming serfs on the land. The great farmers' movement of the 1880's and 1890's reawakened dormant democratic powers the Nation over, released their energies, and broke the long, stultifying spell of the gilded age. It fathered social democracy. It gave to the modern progressive movement its basic characteristics.

Here is a heritage for the American farmer.

A correction. The fourth paragraph on page 25 of the July number should read: 2. Increased attention to problems of noncommercial farms by both natural and social scientists, including experimentation with new patterns of agricultural settlement.

More than Mosquitoes ARE IN SUBURBIA

By LARRY F. DIEHL. *Suburbia is neither fish nor fowl, neither farm nor city—subject neither to city planning nor farm programs, but it should be subject to something.*



ALL OVER the United States, cities are moving out to the country. This movement is sowing the seeds for a new crop of problems, some social, some economic, some urban, some rural.

They have been the subject of much talk but little study. Serious planning is needed if the rural-urban zones are to become areas of opportunity for the city dweller to enjoy the freedom of rural life; otherwise they may become new slums.

In this article, Philadelphia and adjoining counties serve as examples, but the setting could be laid in almost any large American city or in many smaller cities in the Northeast.

New York City has long been changing the landscape of Westchester County and is now influencing Fairfield County, Connecticut. Boston is reaching out into New Hampshire through the medium of summer homes and recreation. Agriculture is becoming a thing of the past in Arlington County, Va., because Government employees in Washington must have a place to live.

"If anyone cares to see what a

cross section of Chicago's population should look like, he can find it by taking a trip through any of the hundreds of new villages located on what used to be prairie land outside of town," said a feature article in the Chicago Daily News. Many more illustrations could be cited; they would emphasize an established fact. Population is shifting countryward.

The shift merits careful attention for many reasons other than the effect upon agriculture. Out of the great demand for rural homes has arisen all the problems that are associated with speculation, subdivision, and development, including maladjustments in transportation facilities, in public-utility services, in taxation, in land values, in rents, thus giving rise to conflicts between rural and urban groups over the functions of local governments. Little research has been directed toward an understanding of the forces that make up urbanization or of its effects other than those impinging directly upon local government.

There has been much loose speculation regarding the impacts of urbanization upon rural areas and agriculture, purporting to show that urbanization has had a "bad" effect upon both. Particular stress is

placed upon the spoliation of the quiet countryside and the unwilling retreat of commercial farmers before this destructive path of urban encroachment.

The implication is that rural life and unspoiled nature have virtues forever denied city people and their ugly environment, and the transfer of city attributes to rural areas often is resented.

Unspoiled Nature

Push aside the golden haze of sentimental retrospect that has prompted this sort of thinking, however, and a different picture appears. Many cities are ugly and artificial, but not just because men made them; profit, not beauty, has been the objective of city-building industrialism. Means are being developed and applied to deal not only with the sore spots within cities, but also to guide the development which takes place outside the city proper.

Farmers no longer depend upon the special providence that is supposed to preside over the rural scene. The Nation has passed from a natural environment of opportunistic exploitation to a man-made environment, largely because our frontiers (which, I suspect, is the "special providence" that once watched over the Nation) are gone. It appears inevitable that the urban and rural problems incident to urbanization must be solved through planning, and the first step in the planning should be an appraisal of the most apparent aspects of the social changes taking place.

The most obvious of these aspects is that urban competition for the use of land has had a profound effect upon agriculture. Commercial agri-

culture has ceased entirely in the residential suburbs of Philadelphia and is fast disappearing throughout the rural-urban zone. The latter includes large parts of the counties adjoining Philadelphia and is characterized by a heterogeneity of urban and rural uses. It is true the census lists quite a number of farms in Delaware County, but few of these could possibly support a family. Close inspection of so-called farms within a 20-mile radius of Philadelphia discloses that most of them are wealthy men's estates and estate farms, other rural residences, and noncommercial part-time farms.

Study of the Philadelphia metropolitan area indicates that demand for land as residential sites caused a rise in land values. An exodus of commercial agriculture followed. Farmers sold their land simply because they could realize a higher immediate profit by selling it than by farming it. According to all good American standards, there was certainly nothing "bad" about selling it; it was good business. By so doing the farmer could retire, as many of them did, and support his family better than he had while farming.

Good and Bad

Similarly the summer-home movement and the establishment of rural residences by commuters from the cities in numerous instances have contributed a great deal to the rural communities affected. Agriculture has been on a definite decline in most sections of the Northeast since about 1850. It is reasonable to expect that the shift to urban uses has tended to raise land values, help maintain the tax base, make electricity available, increase service

trades, provide an additional market for local products, and to increase rural employment opportunities in many communities. Lest I give impression that urban uses of abandoned farm lands almost immediately take the place of agricultural use, I should point out that this rarely has been the case. Such land usually remains idle for a long period of ripening before going into urban use.

Not all the land abandoned by commercial agriculture goes into strictly urban uses. Noncommercial part-time farming is carried on outside the more densely populated areas, providing recreation for office workers and lower living costs for factory employees. Enterprises like nurseries, riding stables, kennels, large flower gardens, amateur playhouses, memorial cemeteries, golf courses, and clubs of various kinds appear.

As significant as these uses, however, is the idle land, the amount of which grows larger and larger as the periphery of the agricultural boundary is approached. Herein lie the problems and maladjustments which grow out of premature and excessive subdivision and speculation in lots, such as undesirable platting patterns, the unwarranted extension of governmental services, isolated communities, and tax delinquency. The latter is of particular significance in communities where public improvements were made in anticipation of property taxes that never materialized or where the tax base built up by premature subdivision proved within a few years to have no real value.

During the 1920-29 real-estate boom, developers and speculators, believing the residential land de-

mand would continue uninterrupted, paid fancy prices for everything they could buy in Delaware County. Generally speaking, the demand never materialized beyond 5 miles from the city limits. Furthermore, after the boom those acres could not go back into agricultural use because of the abnormally high investment that had gone into them. Although assessed as farm land, the fields are producing only a thriving stand of "For Sale" signs.

In many places sod and soil are being stripped off to improve the lawns of subdivisions closer to the city. Where farmers have clung at least to a small part of their land in the outer fringe, subdivisions and farmsteads are located side by side. Here the suburbanites clamor for improvements and additional services. The few remaining farmers rail against additional taxes and against the dearth of farm labor, caused, they say, by the WPA and the estate owner who "lured" the hired man away with higher wages. The following situation serves to illustrate this point with respect to taxes.

In a community 7 miles from the city limits a volunteer fire department needs additional equipment, the purchase of which would appreciably reduce insurance premiums of individual home owners. The aggregate of these reductions would more than offset the cost of the new equipment as met by a proposed one-half mill increase in the tax rate. At a town meeting called to discuss the matter an impasse was reached. The residents who settled there during the building boom of 20 years ago favor the proposal. The few remaining farmers, most of whom have retired on a few acres, do not

The reason is obvious. While each property owner would receive the same degree of fire protection and would realize an equal saving on his insurance premiums, the farmer, whose taxable holdings are measured in acres instead of in lots, knows that he would be required to bear a disproportionately large part of the bill.

Farther and Farther

Outwardly commercial agriculture beyond the urban zone appears to be unchanged, but farm real-estate values have risen and farm labor has moved toward the city. Very little is known, however, concerning the real nature of changes that have taken place in community centers, patterns of ownership, the market structure, and general farm practices.

Still less is known about the future for agriculture as it may be determined through increasing employment possibilities for farmers' sons and daughters. Aside from the complete shift to urban employment, many farmers' sons have become employees on estates as gardeners, caretakers, horse handlers, chauffeurs, and farm managers. It appears doubtful whether the sons will go home to continue farming after the fathers retire.

There is evidence that too rapid urbanization destroys the advantages of rural living sought by the suburbanite. For example, many residents of Upper Darby Township, one of the most progressive of Philadelphia's suburbs, live under crowded, nearly urban conditions, with the added disadvantage of being quite some distance from their work in the city. The result is that people are

now beginning to move out of the more closely, but not completely, settled sections of Upper Darby in search of more space, and what were once superior residential areas are losing reputations as the place to live.

There is nothing new about this phase of urbanization. Fifty years ago one of the best residential districts of Philadelphia was located a few blocks on each side of the main highway leading out of the city, just west of the Schuylkill River, which is now 4 miles from the western periphery of the city. When commerce and industry increased along the river, the wealthy families moved out of the section and abandoned it to the laborers who followed hard on the heels of industry. The old brownstone mansions have been converted into multifamily homes and cheap apartments. The white population continued to move on out as the city caught up with it, until Upper Darby became a densely populated suburb in the boom days of 1920-29; and now Upper Darby and many other suburbs have been overtaken by the city.

Another aspect of the urbanization process is that most subdividing has been entirely unplanned. Platted lands have not been patterned for the best ultimate use, but have been cut up into small lots designed to give speculators the greatest possible returns on their investments. In most developments no provision has been made for parks and playgrounds, nor have residential sections been protected through building restrictions. Many of the golf courses found in the Philadelphia metropolitan area were laid out as a part of the sales campaign to entice people to buy lots or homes in

certain sections. After the particular section was entirely built up, the golf courses were sometimes subdivided and sold.

Vacant Lots

Subdivision around Philadelphia has been both excessive and premature. Scattered throughout the area are isolated subdivisions which have never developed beyond the platting stage. In some cases, brush is growing over the paved sidewalks, streets, and fireplugs placed there 15 to 20 years ago.

The Michigan Planning Commission estimates that an additional 2,000,000 persons could be accommodated on subdivided lots in the area adjacent to Detroit, while that city itself has enough vacant lots to accommodate an increase in population of a million. The results of such rapid and unnecessary subdividing were uncontrolled speculation, costly financing schemes, and questionable financial practices in the sale and resale of lots. Unplanned and excessive subdividing has given rise to serious tax delinquency, for where land is held speculatively and unused, it cannot pay taxes except at the expense of the holder.

The lack of sound policy has led to overcrowding and congestion no different from that found in the city. It is because of the absence of consideration for what people want that the residents of North Philadelphia row-house districts and of Upper Darby now move to suburban developments 7 miles west of the city limits. Furthermore, failure to zone residential neighborhoods properly has resulted, in a few instances, in substandard residential sections that

may be characterized as rural slums.

Generally speaking, urbanization follows the same pattern wherever it is found, but occasionally there are differences peculiar to one particular metropolitan area.

One such case is the historical background of Philadelphia's Main Line estates, located northwest of the city. When Penn founded Philadelphia he deeded most of the high land just west of the city to a wealthy class of people—most of them Quakers. The grants were large, many of them including hundreds of acres, and a landed gentry was formed, which today occupies a large part of the social register of the city. The culture and industry of Philadelphia were then and are now controlled by these families. They take great pride in their cultural and historical background and are keeping their estates intact.

This is the only section around Philadelphia that has withstood real-estate booms and the attendant speculation and subdivision. It appears that the estates will continue much as they now are. As people move farther and farther out, it is likely that a few of the estates may be broken up, but seemingly most of the expansion will take place outside the estate area.

What part is played by transportation and public-utility services in the urbanization movement? Does transportation precede or follow people? What effect on future patterns of city growth will the shift from streetcar to private automobile or public bus create? To what extent are public-utility rates and availability of service limiting factors? What new problems of taxation, land valuation, and rent may arise out of the urbanization of rural land?

What is the social cost of maintaining idle land? What pattern of utilization ultimately develops? How may undesirable patterns be prevented and desirable ones encouraged?

Of equal importance: What should be known about the people who are doing the urbanizing? What are they seeking when they move from Philadelphia to 7 miles west of the city limits? What are likely to be the limits to the willingness of people to travel to and from their work every day? What kinds of communities are they building? What place do retirement plans take in

this picture? Is it a rich man's movement? Is the size of family an important factor, or are they looking for a place where their Great Dane can turn around?

These and many other questions should be answered before judgment is passed as to the "good" and "bad" aspects of urbanization. More needs to be known concerning the motivation behind urbanization if "blighted areas" are to be prevented. Finally, the extent to which rural people become aware of all the aspects of urbanization will determine how active a part they can take in shaping their new community.

Agriculture will put the defense effort first. But there is need for agriculture to keep its condition healthy, also. By continuing the emphasis on soil conservation, farmers can meet the demands made on them without waste of soil resources. And by scaling down their debts and maintaining their farm plants in as sound a condition as possible, they will be further adding to the strength of the Nation's defense effort. Through supplies already on hand, by conserving their soil, and by keeping their farming operations sound, farmers are offering to the Nation an agricultural industry that is a strong force for national strength and unity, but also an industry that will be able to meet its problems after the war is over.

—R. M. EVANS

Kingsbury County

THROUGH 67 YEARS

By W. F. KUMLIEN. Outlined here are the structural changes of a typical South Dakota county through good times and bad; in microcosm, much of the history of the United States. The article grew out of a cooperative research project by the rural sociology department of the South Dakota Experiment Station in cooperation with the Work Projects Administration.



THE BASIC pattern of community organization in Kingsbury County resembles that of other counties of South Dakota, and, indeed, much of the Midwest. It conforms to what sociologists call "the pure, isolated farm type" of rural organization—a network of isolated but contiguous farms with village trade or service centers at fairly regular intervals.

By and large, such communities have a definite but informal pattern. First of all, the rural community is usually village- or town-centered. The center furnishes economic and social services to what is commonly thought of as the trade or service area. In this State the service area consists almost entirely of family-operated farms. The extent and boundaries of the service areas fluctuate and are determined, unconsciously or voluntarily, by the farm families themselves, on the basis of factors like the condition of roads, distance from a given village center, and the services it offers. Farm families often divide their patronage

among two or more nearby villages or towns.

Kingsbury County is in the northern Great Plains. The land is relatively flat. The average growing season is 137 frost-free days. The normal rainfall is approximately 20 inches; this places some limitations on the type of vegetation that can be grown.

The county is entirely rural, having 1,464 farms and 12 hamlets, villages, and towns ranging in population from 5 to 1,060.

Its settlement and later development are fairly typical of other South Dakota counties. The land was settled shortly after the passage of the Homestead Act of 1862 and the Civil War, slowly at first until the Northwestern Railroad came through from western Minnesota in 1879. Later on, two other railroads angled through the county from north to south, and a fourth passed through the northwest corner of the county. Eleven of the twelve inland trade centers were relocated on the newly constructed railroads.

The county has gone through

four distinct periods: The settlement period—1873-1899; expansion period—1900-1920; maladjustment period—1921-1929; readjustment period—1930-1940.

Community Trade Areas

The trade areas of the various rural communities consist almost entirely of family farms surrounding the 12 trade centers. These areas in connection with rural communities vary from time to time; their boundaries are quite unofficial and are not mapped except in a study of this kind. Externally there seems to have been little or no change in the pattern of community life in the last 50 years. As a consequence only the internal structural changes can be measured from time to time.

At the end of the settlement period in 1900 there were 1,338 farms. The number subsequently increased to the maximum of 1,678 in 1930. From that point the number dropped abruptly, so that by 1940 there were 1,464, or approximately the same as in 1890.

The average size of the farms has undergone corresponding changes. Because most of the land was homesteaded in units of 160 acres to a family, it is not surprising that the 1890 average was only 207.3 acres. It had become evident in just a few years that the maximum of 160 acres was too small for this Plains region, so that enlargements were soon brought about: First, through various later extensions of the Homestead Act; second, through purchases of land from owners who had proved up their claims but found they had little taste for pioneering; third, purchases of railroad land to enlarge farm units; fourth, the most impor-

tant of the four, through renting additional land when possible. The largest average of farm sizes, 343.3 acres, was reached in 1900. From that point on the average declined to 300 acres somewhere between 1930 and 1940; the later date revealed a sudden upturn to 341.1 acres.

The average number of improved or tillable acres per farm also had increased steadily from the settlement period until the present. In 1890 only 125.4 out of 207.3 acres were improved; in 1940 the ratio was 294.1 out of 341.1 acres.

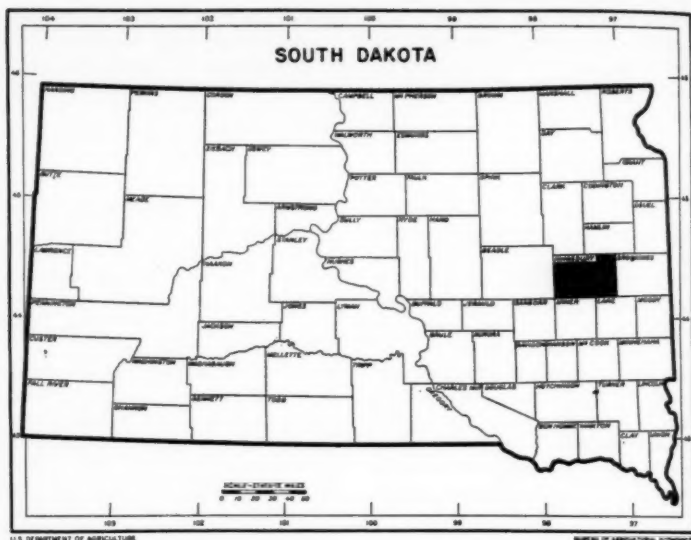
The value of land in Kingsbury County has fluctuated widely during the 50 years of census record. Land averaged \$11.70 an acre in 1900, but increased four times by 1910. The peak was recorded in 1920, following a land boom in 1919. In the next 10 years, in the maladjustment period, the price dropped from \$124.40 to \$54.20. In 1940 it had shrunk to \$15.10, slightly above the 1900 value.

The tenancy rate has increased steadily since 1890. In 1940 it was 64.6 percent—an exceedingly high rate that reflects drastic turn-overs in ownership due to overexpansion, loss of agricultural credit, long periods of drought and depression, and the migration of 15.6 percent of the population from the county by 1940.

Community Trade Centers

As one surveys the structural changes in the trade or service centers over more than a half century, he is surprised at the relative stability of the villages and towns.

In keeping with the settlement history of most homesteaded regions, the agricultural land was settled first; small inland trade centers were soon established at points where rail-



roads might be expected to pass. In 1884 there were some 10 small trading hamlets; 6 of them were relocated when the Northwestern put its rails through the middle of the county from east to west. These centers have become the largest and most stable trade centers of the county. One of them, De Smet, was selected as the county seat. Three of the original inland trade centers have never been relocated on railroads, but two had dropped out of the picture by 1901. One other, strategically located, has survived but has remained relatively unimportant as a community center.

The gain or loss in numbers of trade centers has been influenced by the amount of rainfall; the three periods when trade centers have disappeared have coincided with periods of rainfall shortage. It should

also be noted that during the past 20 years no gains have been made in the number of trade centers, although two have dropped out.

An interesting trend has also taken place in the net total of retail trade units. The peak in number of units prevailed in 1906, in the midst of a good 10-year rainfall cycle, when, generally speaking, town and country people were optimistic about the future.

In the following two periods, from 1921 to 1941, two small trade centers disappeared. It is still more significant that the number of retail business units dropped from 360 in 1926 to 240 in 1936, even though the nonfarm family population had decreased only slightly in the same years.

Kingsbury County villages and towns have remained relatively

small. Only 3 of the 12 centers have grown to slightly more than 1,000 in population. Ten of the twelve are incorporated towns. All parts of the county are within 30 to 40 miles of cities of 10,000 population.

The Population

Several significant changes have taken place in the population since 1890, when the county had passed through more than half of its settlement period and was about to embark on an expansion of both town and country. By 1910 the population had risen to 12,560 and remained near that figure till 1930. During the next decade approximately 2,000 persons, mostly of the farm population, left the county. Every township lost—from 6.3 to 41.3 percent. As the two groups, farm and non-farm, now stand, the first numbers 5,735 and the second numbers 5,096 in the 12 trade centers. This ratio between village and farm population is approximately the ratio for this Northern Great Plains section.

Population density has remained fairly stable for the past 40 years. It now averages 13.3 per square mile for the county. The number of males per 100 females has remained relatively high and has varied but little. The ancestral stocks fall largely within three groups: Scandinavian, 46 percent; German, 27 percent; and British, 16 percent. The relative proportion of the three has remained surprisingly constant despite the changes in the size of the population and group composition. The number of foreign-born persons has declined steadily from 25.5 percent in 1890, to 10.4 percent in 1930, and an estimated 7 or 8 percent in 1940.

The birth rate has declined from

26.6 percent per 1,000 in 1920 to 17 percent in 1940. This rapid drop and the heavy emigration of the rural population between 1930 and 1940 are largely responsible for the decline in elementary-school enrollment in towns and the town and country, especially the latter.

Primary Social Institutions

Family structural changes show definite long-term trends: A decline in size and in birth rate, a slow rise in the death rate, and an increase in the average life expectancy.

In rural organization farm families tend definitely to shift their social activities from locality neighborhoods to special-interest groups, some of which are county-wide in extent. Another marked tendency is the increased reliance of farm families on trade centers. The number of the contacts with villages has grown along economic lines, and in various social, educational, and religious services, including elementary- and high-school education, church life, recreation, and social welfare. As one writer put it, "The village has increasingly become the economic and social capital of the rural community."

One can detect little external change in local government. The township still exists, but is weakening in function and now is principally merely a voting precinct for farm people. Townships still have the right to tax themselves for local roads, building and maintaining township halls, and so on. Few townships now exercise that right. Some township officials are elected in name only. Justices of the peace and constables frequently do not even attempt to qualify for office.

The Kingsbury elementary-school system is changing drastically. In 1930 an average of 14 pupils attended each of the 103 rural schools in the county. By 1940 the average enrollment had shrunk to 9 pupils. Twenty-four of these rural schools are now closed; seven others have five

pupils or fewer. Most of the closed schools send their few remaining pupils to nearby districts, but other districts send their elementary-school children to a nearby village or town. This trend will doubtlessly gain momentum in the next few years. Other educational trends include a definite

Selected changes in county trade area, 1890-1940

Periods	Year	Number of farms	Average size of farm	Average number improved acres per farm	Land value per acre	Tenancy rate
Readjustment (1930-40).....	{ 1940	1, 464	341. 1	294. 1	15. 1	64. 6
	{ 1930	1, 678	300. 2	269. 8	54. 2	55. 7
Maladjustment (1920-29).....	1920	1, 597	305. 4	281. 9	124. 4	51. 0
	{ 1910	1, 523	321. 1	268. 6	49. 3	41. 3
Expansion (1900-19).....	{ 1900	1, 338	343. 3	227. 2	11. 7	29. 2
Settlement (1873-99).....	1890	1, 456	207. 3	125. 4	.....	8. 6

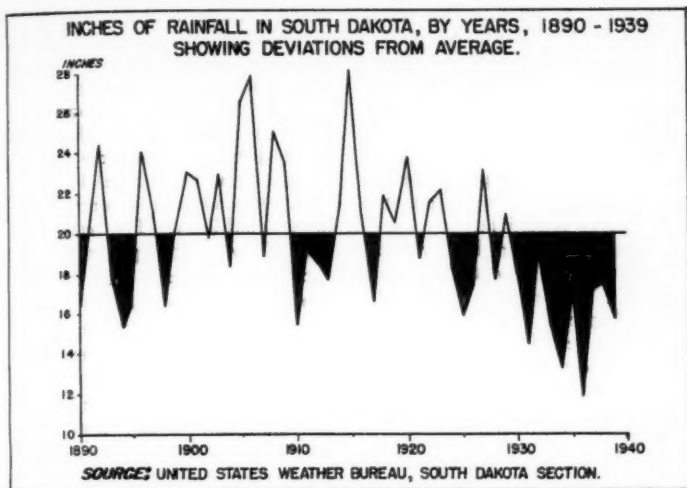
Source: United States Census, 1890-1940.

Selected changes in trade centers, 1884-1941

Periods	Year	Total number of trade centers	Gain or loss in number of trade centers	Net total of retail trade units
Readjustment (1930-40).....	{ 1941	12	0	.....
	{ 1936 ¹	12	-1	240
	{ 1931 ¹	13	0	358
Maladjustment (1920-29).....	{ 1926 ¹	13	-1	360
	{ 1921	14	0	.....
	{ 1916	14	+1	.....
Expansion (1900-19).....	{ 1911 ¹	13	-1	367
	{ 1906	15	+2	.....
	{ 1901	14	+1	271
Settlement (1873-99).....	{ 1890 ¹	13	+3	.....
	{ 1884	10	.....	.....

¹ Below normal rainfall period.

Source: Landis, P. H., South Dakota Exp. Sta. Bulletin 274, 1932, and Bulletin 279, 1933.



decline in the illiteracy rate for the county, an increased proportion of farm children attending high school, and a rapid rise in the average education for adults.

The church is beginning to show a similar tendency for centering activities in village or town. Some 66.1 percent of farm people now say that they attend church in town, in contrast to 20.6; slightly more than 13 percent say they do not attend church at all. Of the 11 open-country churches, only one has a resident pastor.

It is thus evident that the onetime primary social institutions that had their roots in open-country neighborhoods are now gradually but definitely transferring their activities to village or town centers.

It would be an overstatement to imply that a complete transition had taken place in all of these trends, but they are all definitely in process. Social studies within the county

have been made for all five of the institutions mentioned. Three of them, including the family, school, and church, will be described in later articles.

Several factors no doubt have caused the shift from one economic period to another, but the most important have doubtless grown out of seasonal or cyclical rainfall shortages and the introduction of new machines, especially in agriculture, transportation, and communications.

The expansion period is obviously the golden period of Kingsbury County agriculture, as far as its rainfall was concerned. The first decade of the period shows that precipitation conditions were considerably above normal and had much to do with expansion trends in agriculture and trade centers. The following decade, 1910 to 1920, included the World War period, so that a reasonably good rainfall, coupled with fairly high prices for agricul-

tural products, continued the trend of expansion.

Even the economic maladjustments between 1920 and 1930 were brought about by factors other than rainfall shortage. It was the next period of the 1930's, when economic depression was accompanied by the long drought, that brought about the most serious conditions.

The highways were largely undeveloped until the advent of the automobile. The use of the automobile, not widespread until about 1916, reached its peak in the early 1920's. Recently the number of automobile licenses issued has dropped, but there are still 1.1 cars per family in the county. This has tended to increase the number of contacts between the farm family and the village center. It accounts largely for the fact that social, educational, and religious services are now being transferred from neighborhoods to the villages and towns. A wider use of telephones, daily newspapers, and radios has kept pace with similar trends throughout the Great Plains.

The influence of mechanization upon agriculture, transportation, and

communication is so universally recognized that it seems unnecessary to show its application to Kingsbury County throughout its 67 years.

A few significant figures, however, will bring out the change in power farming during the past 20 years. Until 1920 either horses or mules were used in the operation of large machinery. The census of 1920 shows that approximately 10 such animals were used on each farm, although by 1940 the number fell to 3.3. During these same decades the proportion of farmers using tractors increased from 15 to 69 percent. One should remember the important part played in the development of the Plains by windmills, gang plows, and other large implements. The increased use of the tractor has, of course, given a great impetus to this trend.

The transportation problems of homesteading in Kingsbury County were greatly simplified by the coming of railroads. Only a few years elapsed before railroads came, which greatly aided the pioneer farmers in reaching a cash market.

Selected changes in Kingsbury County population, 1890-1940

Period	Year	Total population	Farm population	Non-farm population	Population density
Readjustment (1930-40).....	1940	10,831	5,735	5,096	13.3
	1930	12,805	7,644	5,161	15.7
Maladjustment (1920-29).....	1920	12,802	7,404	5,398	15.7
	1910	12,560	7,748	4,812	15.4
Expansion (1900-19).....	1900	9,866	6,998	2,868	12.1
	1890	8,562	6,852	1,711	10.5
Settlement (1873-99).....					

Source: U. S. Census, 1890-1940.

Farm Consultants:

FOR A NATIONAL SYSTEM

By SHERMAN E. JOHNSON. *Farmers are being asked once again to change their methods and production. How can they do it? Two suggestions are made here, the cooperative employment of qualified consultants to help farmers with management problems and apprenticeships in farming.*



TO HELP farmers make the drastic changes required by the World War, the county agent system was established. To help them through the emergency of the early 1930's, action programs and the FSA rehabilitation program were established.

Again today a major emergency calls for drastic adjustments that family farmers can make only with difficulty; much more intensive assistance in farm management may be needed than has been available.

We and the British need more meat, cheese, eggs, fruits, and vegetables than we have ever produced. Besides, we are selling little cotton and wheat abroad. How can farmers make the changes quickly and easily?

In the South, the Great Plains, and the Pacific Northwest, necessary reductions in cotton and wheat may often be too great a strain on the resources of the family farm. Very likely management is the limiting factor, and adjustments good for individual farmers and the Nation alike may not be made, because farmers lack an adequate background

or knowledge to judge the desirability and ways of adjusting to the changing situation.

In periods of instability, when success in farming requires rapid changes, managerial ability brings higher premiums in terms of income to the farm family than in more stable periods. Normally, many farmers can carry on by following the prevailing local practices. When drastic changes are under way, these customary guideposts become unreliable, and many farmers need other guidance. What to do? And how to do it? Unfamiliarity with the planning and managerial problems involved in the new ways of farming will limit shifts in types of farming even on farms where funds or credit are available. On many farms financial assistance will be necessary, but to be effective it must be coupled with aid in management.

The emergency approach to a solution would be the cooperative employment by public agencies of a qualified person in each county to assist farmers in their management problems. Such an employee would assist farmers to organize their farms to fit local conservation problems, the

needs of the individual family, and the type of production which seemed likely to be most in demand. He would know the provisions of all the farm programs, and would help farmers to obtain maximum benefits from participation in the programs. He would also inform farmers of the most efficient, proved practices in farm production and new techniques.

He could give good service by working with groups of farmers that have similar problems and adjustment opportunities, but obviously one person working with perhaps 1,500 to 2,000 farmers would not have time to do much work with farmers on specific management problems. Assistance of that type requires a more intensive attack.

Cooperative Associations

Through the present system of county supervisors, the Farm Security Administration rehabilitation program supplies some planning and management assistance to its clients, but the supervisors usually must handle about three times as many cases as can be serviced adequately, and are loaded down with loans, collections, and other administrative duties. It would be possible to remedy this situation if funds were available for more personnel, and that may be the solution for farmers who require rehabilitation loans and grants along with management service. However, many farmers above the rehabilitation level will need planning and management assistance in the emergency. At the other extreme is a group below the present rehabilitation level who will need help of many kinds if they are to carry on as farmers.

For the group above the rehabili-

tation level, the organization of co-operative farm planning and management associations seems to hold considerable promise. It seems likely that they could eventually become self-supporting after some initial public help. If intensive planning and management assistance is provided, one consultant probably should handle no more than 50 family farms. With an annual fee of \$75 per farm, an operating budget of \$3,750 could be provided.

What types of service could a management consultant give to justify such a fee? Certainly he would have to do more than supervise and interpret farm accounts. The first job would be to work with the farmer in developing a long-time plan for the farm and the year-by-year steps to achieve it. The plan should be developed to fit the farm, the farmer, the family, the prospective demand situation, and should include advantageous participation in farm programs. Since no farm plan is fixed and immutable, current revisions will be required.

When the plan requires introduction of new enterprises, the operator will need considerable supervisory assistance in learning the new techniques. The adoption of more effective methods in the old enterprises will constitute another important contribution.

Our knowledge of improved techniques often surpasses farm practice. Assistance in these tasks requires a combination of technical and economic judgments, but a competent man can easily render \$75 worth of service in this sphere alone. For instance, if a farmer has 10 cows and the butterfat production per cow is increased by 25 pounds without additional cash costs, the increased

product would pay the management fee if butterfat is worth 30 cents a pound. If the yield of cotton is increased 40 pounds an acre on 20 acres, by the changed use of fertilizer, the introduction of cover crops, or other cultural practices, and if cotton is worth 10 cents a pound, the additional income would more than pay the fee.

Assistance in planning crop and livestock enterprises to fit the new emergency is likely to represent the greatest service that can be rendered by a management consultant in areas where drastic changes are required. But farm management aid should go beyond this, to help the farmer adopt improved practices for old enterprises, as well as the best techniques for new ones. Along with such service might go assistance in obtaining supplies and equipment. Perhaps the association might purchase equipment for cooperative use.

This approach differs from the farm business associations sponsored by the Midwestern agricultural colleges in that it would be more intensive and more concerned with farm planning and actual assistance in management. The business association approach has aimed at getting research information at least as a by-product. It has, therefore, emphasized the accounting phase more than would be desirable in the proposed planning and management service.

Apprenticeship

If cooperative management associations are to be established, we must train men for the job in perspective and in techniques of using available information. Most important of all, however, the planning consultant must have management sense and a

practical experience background in his area. If he has these qualifications, the techniques can be acquired quickly.

I have mentioned the group below the present rehabilitation level and in need of intensive management assistance. It includes many sharecroppers and wage hands in the South. Perhaps the older persons among them will find it difficult to assume management responsibilities in the new ways of farming. If so, a closely supervised tenantry or a wage-hand status perhaps represents their best alternative. But for the younger men among them who are to remain on farms, an apprenticeship training system should be worked out.

It seems feasible to set aside in each county tracts of land that these men could lease as operating tenants under close supervision. Experienced practical farmers should be the supervisors. Livestock and tools would be furnished, and the men would learn new ways of farming. Tenure on these tracts would be limited to 2 or 3 years. Afterwards, an attempt would be made to find places on nearby farms for those who made satisfactory progress. Those who failed should be encouraged to get other work. A new group would then be given the same opportunity. This method of agricultural education would be a departure from our traditional "book learning" courses, but it seems to fit the problem better than the customary approach. Except for the original investment, it should also be largely self-supporting. Defense vocational training for industry is pointing the way to new departures in this type of agricultural training.

Studies in many areas have sug-

gested that rather wide departures from present farming systems may result in increased incomes. Since the suggested farming systems are untried in these areas, farmers hesitate to venture into the untried fields. Many cannot finance the change. Agencies like the FSA and the Soil Conservation Service may find it feasible to set up and supervise ventures of this kind.

Experimenting farmers could be protected from losses that would otherwise prove disastrous by a guaranty that their returns from the experiment would at least equal the income from the system of farming that was being followed.

The present emergency calls for drastic changes in farming, but the greatest stress is likely to come later. We will do well to soften the blows that may fall on operators of family farms in that period. What has been outlined in the foregoing may seem visionary, but in the future it may not be enough to maintain the family farm as the basic structural organization of our agriculture. The suggestions could all be introduced at once in an effort to furnish the needed guideposts in farm management. The extent to which either of these proposals would be adopted could be varied according to the needs of any given area.

Imbued

The races of men who wear wool dominate the world. The keeping of sheep has made characters so strong, so brave, manly, and true that they have changed the history of the world. Moses keeping his father-in-law's flock on the desert ranges of Midian dreamed there dreams, gained strength, faith, and persistent courage that enabled him to lead the children of Israel from bondage to the Promised Land. Young David, watching sheep on the hills of Judea, gained strength, courage, and farsighted wisdom that led him to be the deliverer of his people, their greatest king and singer. There is something that comes from living amid pastures that makes men sane, patient, enduring, imbued with deep love for their land and their country.

—JOSEPH ELWYN WING

Because Tractors

DON'T EAT OATS

By A. P. BRODELL. *Farm mechanization has come in for much attention, here and elsewhere, but in this discussion, Mr. Brodell gives in short compass the meaning of surplus acres and why they now may be a vital asset.*



BECAUSE tractors don't eat oats, millions of acres once used to produce feed for workstock became surplus acres or were released for other uses when machines replaced horses and mules on farms and in cities.

But today new defense demands and the task of adequately feeding, clothing, and housing our people promise a change in the picture. The surplus acres soon may be needed vitally; and, in that light, the whole story of how our agricultural surpluses were built up and how they may become an asset merits review.

Before the World War, animals supplied practically all mobile power on farms. In cities, animals hauled, fetched, carried, built, and doubled in brass in fire departments.

Each year between 1910 and 1914, about 335,000,000 acres were harvested; of this land, about 100,000,000 acres (about 3 acres in every 10) were used for feeding horses and mules on farms and in cities. Indeed, producing feed for workstock was a major job for the American farmer.

About 1 acre in 10 produced our principal export farm products—cotton, wheat, meats, tobacco. About

195,000,000 acres of cropland (approximately 2 acres of harvested cropland per capita) supplied food and fiber for domestic use.

The World War demand for farm products was met largely by putting new land to the plow. Wheat acreage expanded notably. From 1910 to 1920, land in harvested crops increased by about 30,000,000 acres, or about 10 percent. About 20,000,000 of these new acres produced exportable farm products. But the growing domestic population required more land, too. New land supplied most of this need, but about 7,000,000 acres were furnished by a decline of almost 50 percent in the number of work animals in cities and towns in 1910-20.

Mechanization developed most rapidly in cities; by 1930, city workstock were consuming only one-seventh of the feed that they had used two decades earlier. Numbers of horses and mules on farms have declined steadily since about 1915, when mechanization and export demand put an upward trend in horse and mule numbers at a peak.

Earlier, the automobile may have been as responsible as the tractor for this decline. Horseless carriages im-

Cropland harvested: Utilization for specified purposes, United States, 1910-1940

Year or crop season	Total ¹	For principal ex-ports, products ²	For horses and mules—		Food, fiber, and tobacco for domestic consumption	
			On farms ³	In cities	Total	Per capita
	Million acres	Million acres	Million acres	Million acres	Million acres	Acres
1910.....	329	32	85	15	197	2.1
1911.....	333	38	86	14	195	2.1
1912.....	331	38	87	14	192	2.0
1913.....	335	42	88	14	191	2.0
1914.....	336	36	89	13	198	2.0
1915.....	343	57	88	13	185	1.9
1916.....	342	49	87	12	194	1.9
1917.....	351	50	87	11	203	2.0
1918.....	363	46	85	10	222	2.0
1919.....	365	56	84	9	216	2.1
1920.....	360	64	83	8	205	1.9
1921.....	360	62	82	7	209	1.9
1922.....	356	53	81	6	216	2.0
1923.....	355	43	80	5	227	2.1
1924.....	356	59	77	4	216	1.9
1925.....	360	43	75	3	239	2.1
1926.....	359	59	73	3	224	1.9
1927.....	359	51	70	3	235	2.0
1928.....	362	50	68	2	242	2.0
1929.....	365	40	65	2	258	2.1
1930.....	370	36	63	2	269	2.2
1931.....	366	42	61	2	261	2.1
1932.....	373	34	59	2	278	2.2
1933.....	341	29	58	1	253	2.0
1934.....	305	18	57	1	229	1.8
1935.....	345	21	55	1	268	2.1
1936.....	325	20	54	1	250	2.0
1937.....	350	36	53	1	260	2.0
1938.....	351	25	52	1	273	2.1
1939.....	335	27	51	1	256	2.0
1940.....	343	.....	50	.....	.....	.....

¹ Estimated from reports of the Agricultural Marketing Service. Includes acreage of all crops harvested and the acreage of land in nonbearing fruits and tree nuts and farm gardens.

² Acreage figures from 1910-18 from U. S. D. A. Misc. Pub. No. 260 and apply to the calendar year. From 1919-39, estimates from Program Development and Coordination, BAE. The data for this period have application to the crop year rather than to the calendar year.

³ Compiled from feed consumption of work animals as shown by the National Research Project, Work Projects Administration reports, "Tractors, Trucks, and Automobiles," and from reports of Agricultural Marketing Service relative to numbers of horses and mules.

mediately replaced driving and carriage animals; tractors were adopted first for heavy-duty work only. Early tractors did not seem to make the farm more efficient because farmers kept workstock for performing many jobs that could not be done satisfactorily with tractors.

More Tractors

Reductions in numbers of work animals came faster in the middle 1920's, when the production of general-purpose tractors began to increase markedly. In all sections more and more tractors appeared. Work animals were sold or died without replacement. The 1929 depression lowered farm prices and slowed up farm mechanization, but even then horse and mule numbers continued to decline, largely because few colts had been raised. The average age of farm horses went up. More and more land formerly needed for feeding workstock became available for other uses.

Thus, in 30 years, reductions in horse and mule numbers on farms have made available for other uses about 35,000,000 acres of harvested cropland. To this should be added about 15,000,000 acres no longer needed for animals in cities and towns. Workstock also are using less pasture land, for they now use about 10 percent of the total feed produced from pasture compared to about 20 percent in 1910. Reductions in export outlets have made about 10,000,000 surplus acres. Although export reductions have been marked for some crops, they have been a smaller factor in the farm problem than mechanization. In recent years about 25,000,000 acres of harvest cropland have been used to produce

our principal agricultural export products, about 10,000,000 fewer acres than in 1910-14. This reduction would be more than 30,000,000 acres, if we consider the years immediately after the World War.

To tell the story of the continued increase in "surplus acres" and let it go at that would be far too simple. As a matter of fact, opposing trends have been at work.

On the one hand, lost outlets for their produce have thrown millions of acres of cropland into the ranks of the unemployed. Fully as important in building up surpluses in recent years has been the use of improved technology, which has increased the production per acre. This is particularly true in the Corn Belt where hybrids boost yields materially.

On the other hand, the population itself has increased about 40,000,000 since 1910. This would have brought a need for a larger agricultural plant, but for farm mechanization and increased acre yields.

Throughout the past 30 years a fairly constant average of about 2 acres of cropland per capita has been used for producing food, fiber, and tobacco for our domestic population.

80,000,000 Acres

We now have 80,000,000 acres more cropland for the 40,000,000 people added to our population since 1910—50,000,000 acres of cropland that were used for producing horse and mule feed in 1910-14—extra acres, provided without clearing new land or drastically changing the Nation's diet; about 10,000,000 acres have been made available by reduced exports; and around 20,000,000 acres

of new land have been cleared. These additions have kept the acres of cropland per capita at about the same ratio of 2 to 1.

The reduction in the feed needs of horses and mules, together with the reduced foreign markets, have been important factors contributing to our farm problem. The agricultural surpluses of today and the large supplies disposed of in many recent years at very low prices were created largely because of these reduced outlets. But other factors have contributed to the same end. Outstanding among these have been unemployment and the accompanying low purchasing power of many urban workers.

Today's agricultural surpluses may be a distinct advantage to the Nation in the coming years. Defense spending and lend-lease buying are current stimulants that can facilitate the shifts from surplus products to products the Nation has always needed. For example, the defense program already is resulting in vastly improved demand for many products, notably meats, other animal products, fruits, and vegetables. England and her allies are requesting more and

more of these products. Under these conditions production of livestock products will need to be increased. Our surplus grains provide an immediate basis for a substantial part of the desired increase. Even so, surpluses will continue to exist for some products, especially cotton and some types of tobacco.

New industrial uses for farm products are also opening a real, though small outlet for surplus agricultural production today—and offer even greater hope for the future.

Some producers of these surplus products can make desirable adjustments by reducing their acreage of crops for which present supplies are burdensome and by diverting this land to the production of the products that are best adapted to our present and prospective future needs.

In the absence of all these wartime considerations, we can still turn our resources to the task of more adequately feeding, clothing, and housing our own people—a task we have only begun. The millions of acres released by workstock reductions and export losses are needed badly if we can only do our job of wisely directing their use today and tomorrow.

The dynamic forces that are most profoundly affecting the nature of rural life today derive from the industrial city and the metropolitan community; and the most central characteristic of these forces is the economic interdependence that modern technology and industrialism have introduced into the country as well as the city. A situation has been created out of which new kinds of economic disparities and social dislocations have developed. Measures conceived in traditional terms, although helpful, have generally failed to achieve any substantial adjustment.

—PAUL JOHNSTONE

Tenure Status of FARM PEOPLE, 1940

By JOHN F. TIMMONS. *Several questions of national—perhaps international—importance are raised by 1940 Census figures, which show a decline in the proportion of farms operated by tenants. This article discusses some of the implications in general terms for the Country as a whole.*



FOR THE second time in American history, the proportion of farms operated by tenants has fallen—from 42.4 percent in 1930 and 42.1 percent in 1935 to 38.7 percent in 1940.

At the same time, the number of farmers who owned all or a part of their farms went up—from 56.7 percent in 1930 and 57.2 percent in 1935 to 60.7 percent in 1940. Managers decreased from 0.9 percent in 1930 and 0.7 percent in 1935 to 0.6 percent in 1940.

Significant increases occurred in the proportion of farm men not classed as farm operators; the number increased 16.7 percent between 1930 and 1935, and 25 percent between 1935 and 1940. These figures exclude farm operators but include wage and family laborers and other men, some of whom were not employed in agriculture but were counted as farm people by the census.

These figures—which apply to the whole Nation, although wide variations occurred in different areas—raise important questions about the

security of farm people and the National welfare.

Has the tenure status of farm people improved? What happens to farmers who move out of the tenant group? How do these shifts affect agricultural security and the condition of the farm plant?

Fewer tenants may mean that more farmers are becoming owners, or that tenants are becoming mere wage laborers. Obviously, the changes in the number and proportion of tenants mean little in themselves. The landed status of the entire farm population must be considered because a change in the status of any one tenure group cannot be fully understood without adequate thought of the effect of the change upon all other tenure groups.

In an attempt to complete the picture of farm tenure, the number of males, 20 years of age and older, was taken from the last three census enumerations of farm population.

This number, which made up the total number of potential and actual farm operators, was divided into two groups: Landed farm people, mean-

ing full owners, part owners, and managers; and landless farm people, meaning tenants (both croppers and other tenants), wage and family laborers, and other farm men not operating farms. This latter group (the difference between adult male farm population and landed farm people) was subdivided into tenants, as listed in census reports, and male farm nonoperators including all farm men not counted as full owners, part owners, managers, or tenants.

Several deficiencies of this procedure must be noted, although it is believed that they do not invalidate the reasoning. Managers were arbitrarily classified as landed farm people, although they could logically be considered landless inasmuch as they do not own the land they manage. However, their tenure status more nearly resembles that of landed farm people from the viewpoint of economic security. Managers generally manage another's land, rather than operate their own land by choice, and frequently own some land as an investment. The number of managers is small compared to the other groups so that the manner in which they are classified has little effect on total numbers in the latter.

Many persons living on farms are engaged in nonfarm work. In 1930 this number was 1,504,000. Largely offsetting this figure are the people working on farms but not living on farms. In 1930 this number was 1,341,000, of whom 894,000 were rural nonfarm and 447,000 were urban persons. Also farm women and farm males under 20 years of age make up a considerable proportion of the farm nonoperator group and a small proportion of the farm operator group. Present information does not permit adjustments

to be made for all of these conditions.

The 1935 census data are not comparable to the 1930 and 1940 data in several respects, including definitions of terms and dates. However, 1935 data were included for the benefit of those wishing to see 5-year changes uncorrected for incomparabilities of census enumerations.

Some readers may disagree with the use and interpretation given to the terms "landed" and "landless" since "landedness" or "landlessness" is largely a matter of degree; there is no sharp differentiation between the two terms. It can logically be reasoned that no one is completely landed since no individual has inextricable or absolute control over land. Likewise, no one is completely landless since every member of society has certain rights in land; if not individually then by virtue of the fact that he is a member of society in which the ultimate and over-all rights in land are vested (for example, powers to police, to condemn, and to tax).

Obviously, heavily encumbered owners may have less control over land than some tenants holding land under a long-time leasing arrangement or even some resident wage laborers possessing long-term assurance from their employees of keeping their home, their garden, and their job.

Landless Farm People

In consideration of control over land and the limitations of available information, the classification of owners, part owners, and managers as "landed" and tenants, laborers, and other farm men as "landless" appears reasonable for purposes of this analysis.

Landless farm people (that is, men on farms who were not classified as owners or managers) are increasing in number despite the decreases in the percentage and number of tenants, according to the 1940 Census of Agriculture. Although the number of tenants declined 303,094, or 11 percent, during the past 10 years, the number of farm nonoperators—many of whom were formerly tenants—has risen 1,004,431, or 46 percent, during the same period. The total male farm population not classified as owners or managers rose from 4,851,000 in 1930 to 5,552,000 in 1940. They and their families constitute 60 percent of the farm population, more than 18,000,000 persons.

Recent studies have indicated rapid tenure shifts in certain areas, but their magnitude throughout the country was not known until the 1940 census returns were released.

A study by the Arkansas experiment station last June found that between 1935 and 1938 renters and croppers decreased 17 percent in the Delta section of that State, and wage laborers also increased 17 percent in number. In the coastal plain area, renters and croppers decreased 9 percent, while wage laborers doubled. Indications are that these shifts have since been accelerated.

Acresage Reductions

Besides the complete displacement of large numbers of tenants, many tenants have been displaced partly or economically through reductions in acresages—particularly in the Southern cotton areas. Even though a complete tenure change is not made, the acresage per tenant is so reduced

that the tenant must depend largely upon wage labor for a living. Frequently these tenants are little different from wage laborers.

Full owner-operators have increased 172,494 during the past decade. Information is not yet available concerning the proportion of these farmers whose farms are mortgaged and the amount of mortgage indebtedness per farm, both of which are important factors influencing the tenure status of encumbered owners. The number of part owners has decreased by 41,711, and there are 19,538 fewer managers. Compared to 1930 figures, these three tenure groups have increased 111,245, or slightly more than 3 percent. Compared to 1935, the number of landed farm people has fallen by 211,667 or more than 5 percent.

The total farm population in 1940 was practically the same as in 1930 but was about 5 percent smaller than in 1935—a reflection of the back-to-the-city movement of the late thirties.

The total adult male population increased 812,582 during the past 10 years, yet was 77,678 lower than the 1935 figure. The difference between landed farm people and total adult male farm people for 1940 leaves more than 5,500,000 adult male farm people considered landless. This number exceeds by 700,000, or 14 percent, the 1930 figures and by 100,000, or 2 percent, those of 1935.

Included in these figures are tenants, the number of whom fell 11 percent between 1930 and 1940 and almost 18 percent between 1935 and 1940. These decreases were offset by 46 and 25 percent increases in the number of farm nonoperators (in the 10 years and 5 years, respectively).

Larger and Scarcer Farms

And while the number of landless farm people increased, the total number of farms decreased by 191,849, or 3.1 percent, during the past decade. There were 1.5 farm men for each farm in 1940 as compared to 1.3 in 1930, a 13-percent rise.

During the same period the amount of land in farms increased 73,700,000 acres, or 7.5 percent. This means that the average farm grew 17 acres, or 10.8 percent, during the decade.

It is interesting to note that this new farm land is equivalent to 470,000 farms, each as large as the average farm in 1930. Yet, despite this greater farm acreage, the number of farms actually declined. It is apparent, therefore, that farm land is being concentrated in the hands of fewer operators, while the gulf is widening between the ideal and the actual achievement of farm home ownership by farm people.

Although 1940 census information concerning the number of farms in various size groupings was not available for this study, indications are that both large farms and small or subsistence farms have increased, while medium or family farms have decreased.

No attempt is being made to arrive at what should be the tenure goal of farm people—owner operator, tenant operator, farm laborer, or a combination of these. Whether the large-scale commercial farm operated by laborers with its efficiencies of production, or whether the family-sized, owner-operated farm, or the tenant-operated farm is best, is not within the scope of this article. From the viewpoints of security and

economic and social well-being, there appears to be far more divergence within these groups than between them. Some farm people may be better off as renters under an equitable and relatively secure leasing arrangement than as owners heavily encumbered. Similarly, some farm people may be in a better position working as wage laborers protected by minimum wage and labor standards than either owning or renting land under unfavorable tenure arrangements.

Keener Competition

Competition among landless farm people for farms has become very keen as a result of recent tenure changes. Rent is frequently bid up far above the amount which the sustained productive capacity of the land can support. Soil is depleted and living standards are reduced. And the sums paid as rents actually include capital value of land and funds diverted from the living of farm families. Rental arrangements are said to be changing rapidly through bonus payments and variations in relative contributions and receipts of landlord and tenants.

Recent hearings of the Temporary National Economic Committee indicate that at least one of the largest insurance companies is realizing a higher rate of return in rents from foreclosed farms than it is receiving from its investment in farm mortgages. This implies that rents are relatively higher than are interest rates, and one may infer that owner-operatorship is more profitable than is tenant-operatorship. But instead of benefiting from the economic and social advantages of ownership, an

The Landed Status of American Farm People ¹

[In thousands]

Item	1940	1935	1930
Rural farm population.....	30, 151	² 31, 801	30, 158
Adult male farm population ³	9, 288	^{2,4} 9, 365	8, 475
Landed farm people ⁵	3, 736	3, 947	3, 624
Landless farm people ⁶	5, 552	5, 418	4, 851
Tenants.....	2, 361	2, 865	2, 664
Farm nonoperators ⁷	3, 191	2, 553	2, 186
Number of farms.....	6, 097	6, 812	6, 289
Acres of land in farms.....	1, 060, 507	1, 054, 515	986, 771
Average acres per farm ⁸	173. 9	154. 8	156. 9
Number of adult male farm people per farm ⁸	1. 52	1. 37	1. 34
Acres per adult male ⁸	114	113	116

¹ Adapted from census reports. All 1940 census information is preliminary.

² Total farm population not broken down for 1935 Census.

³ Includes males 20 years of age and older. Increase in adult males between 1930 and 1940 is due largely to age changes, as total farm population has changed very little.

⁴ Based on average percentages males 20 years of age and older were of the total farm population in 1930 and 1940. This item not reported in 1935 census.

⁵ Includes full owners, part owners, and managers.

⁶ Includes tenants, sharecroppers and farm nonoperators, and obtained as the difference between adult male farm population and landed farm people.

⁷ Includes wage and family laborers and other adult male farm people who are not owners, managers, or tenants.

⁸ Expressed in whole numbers, thousands not omitted.

Changes by Number and Percentages in the Landed Status of American Farmers

Item	Change from—			
	1930 to 1940		1935 to 1940	
	Number	Percent	Number	Percent
Rural farm population.....	- 6, 437	- 0. 02	- 1, 649, 831	- 5. 19
Adult male farm population.....	812, 582	9. 59	- 77, 678	- 0. 83
Landed farm people.....	111, 245	3. 07	- 211, 667	- 5. 36
Landless farm people.....	701, 337	14. 46	133, 989	2. 47
Tenants.....	- 303, 094	- 11. 38	- 503, 884	- 17. 59
Farm nonoperators.....	1, 004, 431	45. 94	637, 873	24. 99
Number of farms.....	- 191, 849	- 3. 05	- 716, 000	- 10. 51
Acres of land in farms.....	73, 736, 339	7. 47	5, 992, 244	0. 57
Average acres in farms.....	17. 0	10. 84	19. 1	12. 34
Men per farm.....	0. 18	13. 43	0. 15	10. 95

Percentage of Change in the Number of Farm Operators by Tenure, 1930-40

Geographic division	Total operators	Tenure of farm operators					
		Full owners	Part owners	Managers	Tenants		
					All	Croppers	Other tenants
New England.....	8.2	8.5	3.8	43.4	26.9	.....	.....
Middle Atlantic.....	-2.7	-3.2	16.9	-37.5	-3.4	.....	.....
East North Central.....	4.1	6.0	-6.8	-32.3	6.2	.....	.....
West North Central.....	-2.0	-2.3	-13.3	-37.6	4.1	.....	.....
South Atlantic.....	-3.7	11.1	-11.4	-33.2	-15.7	-27.5	-4.7
East South Central.....	-3.7	12.5	-9.8	-19.4	-13.7	-17.5	-10.3
West South Central.....	-12.6	10.8	7.7	-4.4	-26.2	-47.3	14.1
Mountain.....	-3.2	-1.5	-6.4	-35.6	-2.4	.....	.....
Pacific.....	5.5	7.6	5.0	-54.3	10.5	.....	.....
United States.....	-3.0	5.9	-6.4	-35.0	-11.4	-30.3	-3.6

Adapted from census reports; 1940 census data are preliminary. Croppers reported for southern States only.

increasing number of farm people remain without land and must depend upon either receiving employment or land on a decreasing number of farms.

Agricultural mechanization, improved productive practices, shifts in land uses, and natural hazards have been potent forces in reducing the number of farms and in changing the relative tenure status of farm people.

These factors have caused many farmers to organize their farms in such a manner that tenants have been forced down the agricultural ladder as sharecroppers and wage laborers, resident or migrant; other farm people can find neither farms to rent nor other agricultural employment. In this way, the total number of tenant-operated farms has been reduced

without a corresponding decline in the total number of persons dependent upon agriculture for a living. According to the best information available, changes of this type have been especially rapid in the past few years.

More industrial opportunities, brought about by defense orders and generally improved business conditions, are attracting many persons from the landless group. Those taken into the armed services likewise tend to lower the number of men in agriculture. In some areas, especially in places near industrial developments, a shortage of farm laborers is anticipated for this coming year. But these conditions may be temporary, and another back-to-the-land movement similar to that in the early thirties may be expected unless steps are

Farm Tenancy and Prices

Year	Percentage change in proportion of farms operated by tenants from previous census year ¹	Percentage change in average farm prices for the 5-year period preceding each census enumeration ²	Year	Percentage change in proportion of farms operated by tenants from previous census year ¹	Percentage change in average farm prices for the 5-year period preceding each census enumeration ²
1890.....	+10.9	-11.8	1925.....	+1.3	-11.1
1900.....	+24.3	-16.7	1930.....	+9.8	+2.2
1910.....	+4.8	+45.8	1935.....	-7	-42.3
1920.....	+3.0	+99.3	1940.....	-5.7	+21.2

¹ Derived from census reports.

² From U. S. D. A. Technical Bulletin 703 and the Agricultural Situation.

taken to prevent it during and following the present crisis.

Improvement in tenure conditions is frequently associated with increasing farm prices. Better incomes resulting from higher prices should improve the purchasing power of all farmers regardless of tenure status, but may not bring about improved tenure conditions. Since 1880, records comparing farm prices and the proportion of tenants show little relationship between farm prices and the amount of tenancy.

While tenancy increased during each census period up to 1930, agricultural prices have varied greatly between a low index of 57.9 for 1895-1900 to a high of 168.2 for 1915-20.

In 1890, 1900, and 1925, tenancy increased while farm prices decreased; in 1910, 1920, and 1930, tenancy increased while prices increased; in 1935, tenancy decreased slightly while prices decreased significantly; and only one time, in 1940, tenancy decreased while prices increased. A similar lack of relationship exists between farm prices and

changes in the landed status of all farm people. While farm prices went up 21.2 percent between 1935 and 1940, the number of landed farm people fell 5.36 percent and the number of landless farm people rose 2.47 percent.

Many significant regional variations in tenure conditions are obscured in national averages and interpretations. For example, the West North Central States report an increase in tenancy and a decrease in full owners, both contrary to national averages. The East North Central and Pacific States report increases in total farm operators and increases in tenancy, in contrast to national averages. Although farm population figures by age and sex groupings are not yet available by States, indications are that sharp regional variations will be found. Regional variations also occur with regard to the causes of tenure changes, probable future trends, and possible remedial measures for ameliorating tenure conditions.

The National Income

AND NATIONAL DEBT

By HENRY A. WALLACE. *The Vice President considers the increasing national debt and contends that "we will have little to fear if we do all in our power to maintain a relatively stable price level and if we don't allow unemployment and curtailed purchasing power to develop."*



WHEN THE WAR comes to an end there inevitably will be certain persons who will think that the Federal budget ought immediately to be cut in half, or more.

Those persons will have a tremendous influence when this war is over, and their influence will be felt at once with respect to several farm programs.

I know that many farmers have expressed concern over the mounting Federal debt—what it means to farm prices, to land values, national financial stability, the permanence of our land policies.

Let me cite a few facts, not generally available, which I find useful in balancing our viewpoints on the debt burden and our ability to pay for the things the Nation needs for adequate defense and to prevent unemployment afterwards.

To many persons it may be surprising that this year, with our national income greater than in 1929, interest charges on total debts in the United States will be only about \$6,300,000,000, compared to about \$9,500,000,000 in 1929, a reduction of about \$3,000,000,000, or one-third.

It is important that we understand why we have been able to carry an increased Federal debt and still have interest charges on all debts less than in 1929.

Most of the increase in the Federal debt since 1932 has been due to the fact that private capital, in the face of world preparations for war, could not expand sufficiently to restore full employment and purchasing power.

More recently the increase in the Federal debt has been due to the need for building our defenses to prevent being engulfed by aggression.

By the end of 1941 we shall find that private long-term debts will be about \$10,000,000,000 less than in 1929, private short-term debts about \$13,000,000,000 less, State and local government debts about \$3,000,000,000 greater, and the net debt of the Federal Government about \$30,000,000,000 greater. Thus the total of these debts, which in 1940 was \$5,000,000,000 less than in 1929, will this year be about \$10,000,000,000 greater than in 1929; but interest charges, because of lower interest rates, will be fully \$3,000,000,000 less than in 1929.

Gross and net public debt

Year	Gross public debt				Net public debt		
	Total	Federal	Federal agency	State and local	Total	Federal and Federal agency	State and local
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
1921.....	32,364	23,438	450	8,476	29,573	23,025	6,548
1929.....	34,928	16,301	1,867	16,760	28,946	15,706	13,240
1932.....	42,265	20,805	2,130	19,330	34,462	18,142	16,320
1933.....	46,611	23,815	3,279	19,517	36,030	19,691	16,339
1940.....	73,079	45,024	7,809	20,246	52,507	36,296	16,211
1941 ¹	84,000	54,750	9,250	20,000	62,000	46,000	16,000

¹ Estimated.

Net private debt in the United States for selected years

Year	Total long-and short-term private debt	Short-term private debt	Long-term private debt			
			Total	Corporate	Noncorporate	
					Farm mortgage	Urban real-estate mortgage
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
1921.....	95,413	38,982	56,431	32,350	10,702	13,379
1929.....	143,650	56,504	87,146	45,316	9,631	32,199
1932.....	121,596	35,391	86,205	46,845	8,638	30,722
1933.....	113,200	31,927	81,273	45,444	7,887	27,942
1940.....	115,017	39,335	75,682	41,692	6,910	27,080
1941 ¹	120,000	43,000	77,000	42,000	6,900	28,100

¹ Estimated.

So far we have fought our way out of the economic depression and have made headway on our defense program without any real burden to the Nation as a whole. This is clear from the fact that this year's interest charges on private long-term and Government debts are only 6 percent of the national income, whereas in 1932 they amounted to more than 15 percent of a national income that had been cut in two, and to 7.5 percent of the national income in 1929.

If we can keep this healthy relation between the Nation's capacity to carry its justifiable debts and the annual interest costs, we have little to worry about.

But we will have a great deal to worry about if, when the defense program is over, the props are knocked from farm purchasing power by the destruction of the Commodity Credit Corporation, the ever-normal granary, the stamp plan, and the surplus removal system, and if we also knock the props from city purchasing power by allowing unemployment to develop.

We must be realistic enough to know that at that point many shortsighted persons with old ideas will urge the destruction of these protective devices that rest on Government credit and Government fiscal policies. Such a destruction would reduce the national income to such a low point that interest charges would represent at least 15 percent and possibly 20 percent of our national income. No country can endure such a situation without upheaval.

We will have little to fear if we do all in our power to maintain a relatively stable price level and if we don't allow unemployment and curtailed purchasing power to develop. These evils we can stave off if, as

consumers, we conserve and save our rising purchasing power for the post-defense time, when we shall need it; if, as businessmen, we begin to think up post-defense production programs for peacetime goods; and, if as Government agents, we plan for public works and other programs in which private and Government capital cooperate to keep our manpower and our physical resources fully employed.

The steps needed to sustain full employment beyond the defense program have not been developed. I hope a rural conservation works program will be included. The National Resources Planning Board has made recommendations to develop resources and stabilize employment, with special reference to land use and public works and water and energy development policies. There are proposals for a rural housing program and for transcontinental highways. Private industry, too, is thinking of new products and new uses of old products at lower costs as ways of supplying employment when defense orders taper off. Much is expected of the greatly expanded air transport industry for peacetime commerce.

If we inaugurate these broad programs of conservation and development, major financial requirements will be involved; the Federal budget as well as private capital will need to play a major role.

It is in this connection that our data on the annual cost of carrying an increasing national debt (public and private) becomes pertinent.

Those who have seriously studied the greatly changed economic and financial conditions are no longer as concerned about so-called Government spending as they used to be.

Not that we see our way clearly through the new debt structure that has been reared by the circumstances of the depression of the 1930's and the defense program, but we do see more clearly that the huge volume of Federal finances is but a feature of the tremendous world changes of the past few years.

Ten years ago we were frightened by the prospect of a Federal deficit

of one or two billion dollars, when we saw a national income of only \$40,000,000,000 or \$50,000,000,000. Now we are beginning to envision a national income of \$100,000,000,000 or more and see more clearly the joint function of Government and private funds in relation to the development of natural and human resources and to the preservation of our way of life.

Net public debt and interest

Year	Federal Government and Federal agency debt			State and local government debt		
	Net debt	Interest rate	Interest	Net debt	Interest rate	Interest
	Million dollars	Percent	Million dollars	Million dollars	Percent	Million dollars
1921.....	23,025	4.297	989	6,548	4.48	293
1929.....	15,706	3.994	627	13,240	4.54	601
1932.....	18,142	3.496	634	16,320	4.55	743
1933.....	19,691	3.202	631	16,339	4.52	739
1940.....	36,296	2.519	914	16,211	3.50	567
1941 ¹	46,000	2.500	1,150	16,000	3.30	560

¹ Estimated.

Net private debt and interest

Year	Private long-term—			Private short-term—		
	Debt	Interest rate	Interest	Debt	Interest rate	Interest
	Million dollars	Percent	Million dollars	Million dollars	Percent	Million dollars
1921.....	56,431	5.68	3,205	38,982	6.68	2,604
1929.....	87,146	5.73	4,993	56,504	5.83	3,294
1932.....	86,205	5.72	4,931	35,391	4.71	1,667
1933.....	81,273	5.68	4,616	31,927	4.27	1,363
1940.....	75,682	4.62	3,497	39,335	2.63	1,035
1941 ¹	77,000	4.55	3,504	43,000	2.60	1,118

¹ Estimated

Net debt and interest

Year	Grand total; public and private long-term and short-term—			Private long-term and all Gov- ernment—		
	Debt	Interest rate	Interest	Debt	Interest rate	Interest
	Million dollars	Percent	Million dollars	Million dollars	Percent	Million dollars
1921	124,986	5.67	7,091	86,004	5.22	4,487
1929	172,596	5.51	9,515	116,092	5.36	6,221
1932	156,058	5.11	7,975	120,667	5.23	6,308
1933	149,230	4.92	7,349	117,303	5.10	5,986
1940	167,524	3.59	6,013	128,189	3.88	4,978
1941 ¹	182,000	3.48	6,332	139,000	3.75	5,214

¹ Estimated.

Interest on specified debts related to national income

Year	Interest charges on—			National income	Interest charges as percentage of national income	
	All net debts	Private long-term and Gov- ernment debts	Private short-term debts		All interest	On private long-term and Gov- ernment debts
	Million dollars	Million dollars	Million dollars	Million dollars	Percent	Percent
1921	7,091	4,487	2,604	52,800	13.4	8.5
1929	9,515	6,221	3,294	83,365	11.4	7.5
1932	7,975	6,308	1,667	39,991	19.9	15.8
1933	7,349	5,986	1,363	42,489	17.3	14.1
1940	6,013	4,978	1,035	76,035	7.9	6.5
1941 ¹	6,332	5,214	1,118	88,000	7.2	5.9

¹ Estimated.

The Problems of WESTERN SOLIDARITY

By PRESTON E. JAMES. *A geographer speaks his mind about the difficulties and the promise of Western Hemisphere cooperation: "Solidarity can be built only on the foundation of a mutual understanding and respect." He bespeaks a realistic approach to the subject.*



CAN the Western Hemisphere nations live together and prosper in more or less complete isolation from the rest of the world? This question, frequently raised in the United States, involves factors not widely understood.

In a country where democratic processes determine public policy the prevailing lack of information regarding the lands and peoples of Latin America and regarding the geography of essential raw materials and markets is of serious concern. For instance, it should be recognized that the establishment of a self-sufficient commercial bloc within the Western Hemisphere would require a considerable rearrangement of the normal routes of commercial exchange. The hemisphere as a whole has long been a major producer of raw materials. Even the United States, after it had become an industrial country, continued to export such raw materials as cotton, wheat, and minerals.

The development of manufacturing industries in certain parts of Latin America, while important locally, does not change materially

the picture of Latin American foreign trade as composed of exports of agricultural materials and minerals and imports of coal and manufactured goods.

Furthermore, most of the trade of the Western Hemisphere has been with places outside the hemisphere. Of the exports of all the countries of the hemisphere in 1937, only 39 percent went to other American countries; and of the imports, only 43 percent came from other countries of the Western Hemisphere. Diversion of these normal currents of trade so that the hemisphere can form an economic unit essentially free from the raw materials and markets of Europe or Asia would raise many and complex problems.

In answering the question regarding the possibility of hemisphere isolation, the first consideration has to do with the potential market within the hemisphere for the raw-material surpluses. Such a market, in order to be of significance in this problem, must be offered by the major industrial regions of the world, not by minor industrial districts of only local importance. Nearly 90 percent of the industrial capacity of the

world is concentrated in three main areas: In northeastern United States, in Great Britain, and on the European continent in Belgium, northern France, and western Germany.

Japanese industries have advanced rapidly during the past few decades and are just reaching a position of international significance. But no other parts of the world have had a development of manufacturing that in any way is comparable to these.

Meanwhile, the Western Hemisphere has been geared to supply raw materials to all of these industrial centers, and no one of them alone at present could possibly absorb all the products of the Americas. Special difficulty would be encountered if it were proposed that all of the raw materials of the hemisphere were to be absorbed by the industries of the United States, because so many of the Latin American surpluses duplicate those of our own country. The chief raw materials produced in excess of hemisphere demand, in order of value for 1937, were petroleum, wheat, cotton, copper, meat, corn, and tobacco. The United States has its own surpluses of all these commodities except corn, and Argentine corn normally is sold almost exclusively in Europe—40 percent of it in Great Britain.

The chief petroleum surpluses come from the United States and Venezuela; the cotton surpluses from the United States, Brazil, and Argentina; the copper surpluses from Chile, the United States, and Canada; the meat surpluses from Argentina, Canada, the United States, Brazil, and Chile; the tobacco surpluses from the United States, Brazil, and Canada.

Besides these, there are other

items of lesser importance in the international order, but of great local importance in certain parts of the Americas—for example, coffee, cacao, henequen, and even sugar. With the exception of certain tropical products, the Latin American surpluses only aggravate the problem of disposing of similar surpluses already present in the United States, a situation that has received much public attention in relation to the purchase of Argentine beef by the United States. Serious thought should be given to the impact of changed avenues of commerce upon the regions of the hemisphere that have been most productive commercially and so have reached the highest material standards of living.

Raw Material Deficiencies

A second consideration has to do with raw material deficiencies.

A modern urban industrial region with large-scale manufacturing plants usually depends on a wide geographic base for essential supplies of agricultural and mineral products. This is the strength of such a region in times of international peace—the essential fact that distinguishes modern great cities from the cities of past centuries that were closely dependent on their immediate surrounding territories. There is no difficulty in finding sufficient quantities of agricultural and mineral raw materials in the world as a whole—in a world of peace and order there would be an abundance for all nations, for modern technology has enormously increased man's potential productivity.

But the sources of raw materials, unfortunately, are very unevenly distributed.

It is a fact of enormous importance that there are certain essential raw materials that are not available in sufficient quantities from Western Hemisphere sources. Many of these products are used only in small amounts, yet they are of vital necessity in the construction or maintenance of modern machinery or in the support of large urban populations. In many instances substitutes might be provided, but at a cost that could perhaps be justified on social or other grounds, but hardly on traditional economic grounds.

The raw-material deficiencies of the Western Hemisphere include 13 chief commodities. The most important mineral deficiencies are tin, manganese, chromium, tungsten, antimony, magnesite, mercury, and potash. The chief vegetable deficiencies are rubber, quinine, silk, manila fiber, and certain kinds of vegetable oil. There are sources of many of these items in the Western Hemisphere, but they are not large enough. Although the United States uses more than half of the world's tin, no tin ores are available except in the highlands of Bolivia and northwestern Argentina. Partly because of the technical difficulty of smelting these ores, there are no smelters in the Western Hemisphere, although plans to build such a smelter in the United States have been made. Under normal conditions the Bolivian ores are mixed with Malayan tin in the British smelters. A somewhat similar condition is found in the supply of manganese and chromium.

Brazil and Cuba produce small quantities of these ferro-alloys, together supplying a little more than 20 percent of the needs of the United States for manganese and 13 percent

of the needs for chromium. Small quantities of tungsten are produced in Bolivia, Peru, and Mexico; antimony is supplied in considerable quantities from Mexico and Bolivia; but the other mineral deficiencies are almost entirely lacking in the hemisphere.

Perhaps the most serious deficiencies among the vegetable products are rubber and quinine. Both of these commodities originally were derived exclusively from South American sources—rubber from the trees that grew wild in the forests of the Amazon, quinine from the bark of the cinchona tree from the eastern Andean slopes of Colombia, Ecuador, Peru, and Bolivia. But before the outbreak of the first World War both rubber and quinine had ceased to be products of importance in Latin American trade. The rubber plantation of Malaya and Sumatra and the cinchona plantations of Java now dominate the markets. Considerable efforts are now being made to stimulate rubber planting in the Western Hemisphere.

Sentiments of Solidarity

This problem of hemisphere solidarity cannot be dismissed without a consideration of the sentiments involved in it.

The "Yankee Peril" cannot be wholly eradicated from the minds of the people to the south of us by a decade of "good neighborliness." Argentina, especially, challenges the right of the United States to dominate the councils of the hemisphere, even in the economic field. None of these countries has any sentimental attachment to the United States that would weigh against the practical fact that many important mar-

kets for their surplus products are to be found in Europe—whether in Great Britain, Germany, or elsewhere.

There is one point, however, on which all the States of the Western Hemisphere think alike. Each one is deeply jealous of its own political sovereignty, its own freedom from outside interference. This feeling for political independence springs from the common historical experience of the peoples of the Western Hemisphere. It is directed as much against one another as against powers outside of the hemisphere.

Penetration by the United States or anyone else would be resented and feared; the menace of foreign interference is felt in Latin America to apply not to any one country but to all great powers. While it is true, therefore, that if the Western Hemisphere and the British Empire could be brought together in a single commercial bloc, many of the problems of surpluses and deficiencies could be solved, the fact remains that if this constituted domination, economic or otherwise, of the English-speaking peoples over the Latin Americans, it would be very unwelcome.

These considerations of sentiment are not to be overlooked in the planning of a new world order.

If hemisphere self-sufficiency has its serious difficulties, closer hemisphere cooperation is not only highly

desirable, but perhaps even a vital necessity, for all the peoples of the Americas. But it should not be jeopardized by ignorance of the conditions.

People in the United States must understand before it is too late that Latin America is a highly diverse land, with peoples of many different racial and cultural origins, living in many different stages of economic progress, even speaking different languages.

Latin America is not a new land, awaiting only the magic touch of business enterprise—rather, it is an old land, long subject to the exploitation of its resources by a population that is notably small in relation to area. And the Latin Americans must learn, before it is too late, that not all North Americans are interested exclusively in business profits and in the exploitation of resources for personal gain. Somehow the passion for production and the driving energy of the North Americans must be made understandable to the other Americans; and the Latin sensitivity and love of the beautiful must be valued and appreciated in the United States.

Solidarity can only be built on the foundation of a mutual understanding and respect. Only then can the necessary compromises between conflicting ideologies and the essential sacrifices of local interests be made successfully.

We live in a dynamic world—a world in which physical nature, man's habits, and reactions, and man-made institutions are all constantly changing.

—F. F. ELLIOTT



Books

WILDLIFE CONSERVATION. *Ira N. Gabrielson*. The Macmillan Company. New York. 240 pages.

by J. PAUL MILLER

DR. GABRIELSON, author of several previous books, has devoted his life to conservation work. He has had more than 25 years' service in what was formerly the Biological Survey and is now the Fish and Wildlife Service. Dr. Gabrielson rose from the ranks to head an organization many times larger than it was in the days he entered the service. He has served in many field and administrative branches of the service and perhaps this is in part an explanation of the feeling of confidence and completeness the reader experiences when reading his latest book, "Wildlife Conservation."

In writing this treatise, Dr. Gabrielson apparently had in mind a large part of the reading public. The book is authoritative and technically correct, yet it is written in a pleasant readable style and in a language understandable to the layman.

Technicians may find "Wildlife Conservation" somewhat inadequate since it is not designed to present new and startling discoveries. Its purpose is more apparently the assembling in one place of information of proven quality and merit, and of presenting it in a pleasing and understandable manner. In this respect, it fills its purpose admirably and satisfies a great need.

CONSERVATIONISTS will appreciate the broad, understanding, sympathetic viewpoint and the thorough knowledge of the subject evidenced by the author.

In the preface, Dr. Gabrielson says that there are three concepts which form the basis of the conservation movement. The first of these is that soil, water, forest, and wildlife conservation are only parts of one inseparable program.

After discussing soil erosion in considerable detail, Dr. Gabrielson says, "What is the bearing of all this on wildlife conservation? There is a popular belief that land that is of no use for anything else is good enough for wildlife. This thought arises largely no doubt from the fact that wildlife has frequently been crowded into such places as a last stand in the face of increasingly intensive use of the land by man. Wildlife requires suitable food and shelter just as does any domestic animal and can exist only precariously and in small numbers on the waste lands ruined by erosion. In bitter truth, these lands have been seriously impoverished or destroyed not only for farming and grazing but also to a very large extent for the occupancy of any form of life that is useful to man."

Dr. Gabrielson enumerates three basic difficulties that must be surmounted in bringing about better conservation of our natural resources. These are: (1) The short-sightedness of the human race, (2) the tendency to seek panaceas rather than real remedies, (3) the lack of knowledge and understanding. The remedies he suggests are: (1) Eternal vigilance for the protection of our natural resources, for, "There will ever be grasping hands eager to despoil our basic resources, and there must be strong and resolute conservation forces to oppose and control the spoilers," (2) that the pedagogical details involved in education be left to the school masters for he says in discussing the educational program, "It makes little difference *how* it is done, if only it is done."

HE GOES FURTHER and says, "Constant education and unremitting public pressure are needed to convince all concerned that no matter how far this country has succeeded in restoring its forests and wildlife and in conserving the productivity of its water and the fer-

tility of its soils, for all time to come it will be necessary to see that these resources are never again exploited to the point of destruction."

He points out that "To provide for constantly better use of soil and water resources, the present trend toward restoration of environmental conditions, whether of forests or grasslands, marshes or lakes, must be carried much further."

EDUCATORS have long expressed a need for a textbook on conservation for use in the secondary schools. Although not written in a textbook manner, this book appears to have very definite possibilities for this purpose.

Sportsmen will find Dr. Gabrielson's book of inestimable value in helping them to understand many of the problems of game production and utilization.

The book is divided into 16 chapters, 9 of which are devoted to soil and water conservation, land use, and related subjects. It is a worthwhile contribution and should assume an important place in conservation and land use literature.

FARM OWNERSHIP, TENANCY, AND LAND USE IN A NEBRASKA COMMUNITY.
Robert Diller. The University of Chicago Press. Chicago. 192 pages.

by ARTHUR ANDERSON

ACCORDING to the author, this study developed as an outgrowth of an interest expressed in the history of the ownership of land and was begun "without benefit of strongly held *a priori* opinions on the subject."

It was expected, however, that certain popular notions about the ills and evils of farming and landowning in the Middle West would be substantiated and that the main task,

therefore, should be to suggest ways and means of reform. The facts have forced a change of opinion, and the study has developed into an attempt to refute or, in some cases, to qualify the very notions it was originally supposed to prove.

The introduction consists of a brief review of various concepts pertaining to the instability of farm ownership, increasing tenancy, "suitcase

farming," changing attitudes and customs, and related opinions generally pointing to the decadence of farming.

"But with all this body of opinion, the first point to be observed is not its superficiality but its popularity; it is this that makes it worth while to investigate its factual basis..

• • • A national or regional study would be possible, but it was felt that facts and conclusions more interesting and accurate would be gathered from an individual community studied by way of illustration. Hence this study confines itself to a single community—Diller, Nebraska."

THE INTRODUCTION is followed by chapters on the natural background, speculators and settlers, the economic background, the development of stable tenure, functional tenancy and roads, farms, and fields. Most of the factual information, including sources and methods of research, is presented in 19 appendixes occupying almost as much space as the text proper.

In the chapter on the natural background the physical and climatic characteristics of the area receive considerable attention. In this connection it is pointed out that "from 1867 to 1892 stretched a 26-year period of good moisture, in the midst of which the Diller area was settled."

Land-settlement policies were reviewed briefly with the statement that 2 or 3 speculative ownerships, and in some instances as high as 20, intervened between Government ownership and settler ownership. Generally, however, such speculative ownerships returned but little profit, and frequently the land changed

hands at a loss. It is contended that this did no harm and served the one useful purpose of breaking up into small tracts the 50 percent of the area that was patented to 4 railroads, and to a limited number of individuals. Thus a stabilized and widely distributed ownership which could have been accomplished by careful planning gradually developed.

THE ECONOMIC history is divided into two periods—one of general prosperity from about 1880 to 1920, characterized by expanding markets and rising land values, with foreclosures almost unknown, and the other one of adversity, from 1920 to the present, resulting from the agricultural depression and less favorable crop years, with approximately 10 percent of the land changing hands under forced settlement and considerably more threatened by foreclosure. It is concluded, however, that "this second period has been merely a time of adversity, not of collapse. The period shows numerous signs of a drastically reduced income and some loss or depreciation in value of personal property, but property in land has been little disturbed."

The conclusion that there has been no unsettling loss of property even though there has been a drastic reduction in income is supported by statistics to show that there has been a decreasing trend in the amount of land held in short ownership; the proportion of old names appearing on the records as owners has been steadily increasing; a lengthening of the common term of ownership; a gradual increase in the proportion of land inherited as against purchased land; and an increase in rented land.

The freedom of each person to think, to search for knowledge, and to speak the truth as he sees it is the air in which civilization lives and breathes. If the liberty to beget ideas is smothered, civilization dies.

—ALFRED S. STEDMAN

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